Assessment of Bacteriological Quality of Drinking Water in Belagavi City, India

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Assessment of Bacteriological Quality of Drinking Water in Belagavi City, India

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Abstract:

With the growing population and industrialization, the potability of drinking water has been decreased due to pollution and improper sanitization. In this context the present study was aimed to check the potability of drinking water by Multiple Tube method and Membrane Filter technique and to identify bacteria from Membrane Filter technique. 100 samples from 10 different wards of Belagavi City were collected. Bacteriological analysis was done for the presence of fecal coliforms, fecal Streptococci, Salmonella and Shigella by presumptive coliform test and multiple tube method (MPN) and membrane filter (MF) techniques were used for estimation of coliform bacteria. Twelve out of 100 samples were found to be unsatisfactory for drinking purpose. A total of five different strains were isolated from 100 samples. Genera isolated were Corynebacterium species, Micrococci, Gram positive Bacilli, Staphylococcus aureus, Citrobacter freundii. 88% of the sources were hygienic for drinking purposes and for the rest of the sources, proper measure should be taken to maintain sanitary of the drinking water by regular check on the equipment, maintaining structural faults and proper disinfection of equipments.

Keywords: Potable water; Most probable number; Membrane filter; Fecal coliforms; Water sources.

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